

SMAP Applications Workshop on Health and Disease Exposure Hosted by



Centers for Disease Control and Prevention Roybal/Clifton Road Campus, Atlanta, Georgia January 7-8, 2014

The Soil Moisture Active Passive (SMAP) Application workshop on Health is a unique opportunity to collect and distribute information about different user needs while discussing how SMAP (launch October 2014) soil moisture and surface freeze/thaw state data products can be used to address needs of the Centers for Disease Control and Prevention (CDC) and the broader public health community.

Goals of the SMAP Applications Workshop:

- Identify the challenges and needs of CDC communities (i.e. Drought, Hazard, Climate, and Zoonotic) and provide information on the value of soil moisture applications
- Incorporate SMAP data into the Environmental Public Health Tracking database
- Link the SMAP Community to CDC so health related research can be directly applied to communities

Expected Workshop Outcome: Connect the mission science with the Drought, Hazard, Climate, and Zoonotic programs and initiatives within CDC in order to indentify the benefits from incorporating SMAP products into existing research models, operational applications and local decision-making agencies. Build partnerships between CDC and NASA research to improve science applications for society.

Day 1	Tuesday, 7 January 2014		
8:30am	Registration and Coffee		
	Speaker	Торіс	
9:00am	George Luber, Associate Director for Climate Change, CDC, National Center for Environmental Health (NCEH), Division of Environmental Hazards and Health Effects (DEHHE), Climate and Health Program (20 min)	Workshop Welcome	
9:20am	John Haynes, NASA HQ (20 min)	Welcome, Introduction from NASA Applied Sciences.	
9:40am	Round Table Introductions- Identify who is present from groups within CDC. (Hazards, Famine, Drought, Heat, Zoonotic, Vector Disease)		
9:55am	Vanessa Escobar (SMAP Applications Deputy Coordinator) (15 min)	SMAP Applications Program, Early Adopters (EAs) and the value of pre-mission work for applications	
10:10am	Dara Entekhabi (SMAP Science Definition Team Lead) (20 min)	SMAP Mission overview	
10:30am	Vanessa Escobar (5 min)	Review agenda and charge to workshop	

10:35 to 10:45am	Morning Break			
10.434111	Speaker	Topic		
10:45am	Darren Drewry, NASA, AIRS Mission	Remote sensing and vector-born disease		
100104111	(Atmospheric Infrared Sounder Mission)	(dengue).		
11:00am	Hosni Ghadira, Madsar Institute, SMAP EA	Mapping the extent of Saharan dust emissions using SMAP soil moisture product		
11:15am	Ashutosh Limaye, SERVIR (SERVIR is a Spanish acronym for "Regional Visualization and Monitoring System")	SMAP data in SERVIR regional data system		
11:30am	Johnathan Case, SPORT, SMAP EA (Short-term Prediction Research and Transition Center)	Data assimilation of SMAP observations and the impact of weather forecasts and heat stress		
11:45am	Panel: Questions and discussion on NASA	health applications research and presentations		
LUNCH 12:00-1:30pm at CDC Lunch Facility Posters Displayed During Lunch				
CDC research presentation topics and panel discussion Identifying challenges and addressing where there are needs for data				
1:30pm	TBD, CDC	West Nile Virus, mosquito borne diseases		
1:45pm	Ben Park, Medical Epidemiologist, CDC, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of Foodborne, Waterborne, and Environmental Diseases (DFWED), Mycotic Diseases Branch	Mycotic Diseases, Coccidioides		
2:00pm	Michael Beach, Branch Chief, CDC, NCEZID, DFWED, Waterborne Disease Prevention Branch	Climate sensitive issues associated with recreational water use		
2:15pm	Hugh Mainzer, Deputy Associate Director, CDC, NCEH/Agency for Toxic Substances and Disease Registry (ATSDR), Office of the Director, Office of Environmental Health Emergencies	Drought Response Workgroup		
2:30- 2:45pm	Afternoon Break			
2:45pm	Scott Dunbar, SMAP Mission	SMAP data products		
3:05pm	Gary Curcio, U.S. Forest Service, SMAP EA	SMAP soil moisture data to assess the wildfire potential of organic soils on the North Carolina Coastal Plain		
3:25- 4:30pm	Panel/Group discussion: Connecting the CDC projects to NASA Products How can new mission data address the challenges and concerns presented?			
4:30pm	Day 1 Adjourn Poster Session to be held prior to Social Dinner (TBD)			

Day 2	Wednesday, 8 January 2014		
8:30am	Registration and Coffee		
	Speaker	Topic	
9:00am	Vanessa Escobar (SMAP Applications Deputy Coordinator) (20 min)	Welcome. Breakout sessions. Connecting the mission to thematic health topics (identified by CDC). Review Day 1.	
9:30- 11:00am	Breakout Group Topics: Climate, Vector-borne Diseases, Zoonotic Diseases, and Hazards. (Groups Thematically Co-led by 1 CDC and 1 NASA representative in each group - Leaders tentative). Breakout Sessions in four different application groups: (1) SMAP and Climate (heat stress, drought) (Room #) (2) SMAP and Vector-borne Diseases (Room #) (3) SMAP and Zoonotic Diseases (Room #) (4) SMAP and Hazards (flood, waterborne diseases, and fires) (Room #) Charge to the breakout groups • Identify primary products, institutions, and organizations within application areas that could benefit from satellite observations • Describe research requirements as it applies to CDC		
11 15	 Identify data challenges and needs (resolution, format, latency, access, etc.) Define next steps forward for each application group and Identify potential parameters (A 15 minute break will be taken at the end of the break out session) 		
11:15am- 12:00pm	_	Report back and identify potential partners and 3 action items per breakout group	
•	LUNCH 12:00-1:30pm at CDC Posters Displayed Du	C Lunch Facility	
1:30pm	Lina Balluz, Branch Chief, CDC, NCEH, DEHHE, Environmental Health Tracking Branch	Data sharing-How to get NASA data to the CDC	
1:50pm	Andy Dent, Program Director, CDC, ATSDR, Division of Toxicology and Human Health Sciences, GRASP	Geospatial Research, Analysis, and Services Program (GRASP) and GIS at CDC	
2:10- 2:50pm	Plenary Session Linking SMAP related products to CDC objectives How can SMAP help improve applications within CDC		
2:50pm	Vanessa Escobar	Closing, take home message, review actions from meeting	
3:00pm	Day 2 Adjourn		